ties of the ureters, it had a normally acid reaction; but that as it trickled, drop by drop, over the mucous membrane of the bladder, it became rapidly alkaline, from the admixture of a copious alkaline mucus which was secreted from the exposed membrane. Dr. Rees conceives the alkaline secretion to be thrown out for the protection of the irritable membrane of the bladder, and thinks that a certain number of cases of alkaline urine are due to the stimulating effect of an originally acid secretion upon the genito-urinary mucous membrane, which from some cause, secretes an excessive quantity of alkaline fluid. He explains the effect of alkaline remedies, in some instances, in removing the alkalinity of the urine, on the supposition that the urine as secreted, being reduced nearly to the neutral condition, is thereby deprived of all irritating properties, and is enabled to pass over the genito-urinary mucous membrane without exciting any alkaline discharge to affect its properties secondarily. The distinction between such cases of alkaline urine and others, is only to be effected by attention to the history and symptoms, and by chemical and microscopical examination of the urine.—*Medical Gazette*, April, 1848.

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8. *Characters of the Urine in Bright's Disease.* By A. B. Garrod, M.D.—In the early stages, or acute form of this disease, albumen appears to be thrown out, in addition to the ordinary urinary constituents, and with it we frequently find the colouring principles or globules of the blood. Hence the specific gravity is usually high, the amount of secretion diminished, and frequently a deposit of urates takes place on the cooling of the fluid. Even in this stage, however, the urea is deficient; at least, the total amount eliminated in the twenty-four hours; and this principle is found to be retained in the blood. As the disease advances and becomes chronic, the character of the urinary secretion greatly alters, the albumen often becomes less in amount, and the total quantity of solids is also much diminished, and hence the urine is of low specific gravity, paler in colour, and generally slightly opaline, an appearance due to the suspension of certain insoluble matters consisting of the cylindrical lining of the urinary tubules, fat globules, epithelium scales, &c.; these, by standing, form a light flocculent deposit; the persistence of these bodies in the urine may be almost regarded as pathognomonic of the disease; although temporarily, they may occur in any affection in which there exists an irritated or congested condition of the kidneys. The quantity of urea excreted in the twenty-four hours is generally very deficient, and its relative amount, compared with the total solids, is also much lessened. It is in these cases that we find abundance of urea in the blood and effused fluids, the kidneys having lost their power of eliminating this body. The amount of watery excretion may be either large or small; sometimes it considerably exceeds the normal average, at others it falls far short of it, and in the last stages the urinary secretion may be totally suppressed. In the following table two analyses are seen, taken from Becquerel, showing the amount and characters of the urine in two cases of the disease.

	I.	II.
Amount of urine in twenty-four hours	28 oz.	78 oz.
Specific gravity	1016.3	1008.4
Water	965.0	986.3
Urea	11.6	1.8
Uric acid	0.3	0.2
Extractives	4.6	5.5
Fixed salts	6.6	2.9
Albumen	11.9	3.4
	1000.0	1000 0

Albumen is stated occasionally to occur in the urine after the ingestion of certain articles of diet, as pastry; also after the administration of mercury, and the application of blisters of cantharides. Of the power of the first-named cause I have never seen an example, and that mercury by no means frequently produces such a state of urine I have had ample proof, although, in Bright's disease, salivation is often readily produced by this mineral, which may have led to the opinion of its having caused the presence of the albumen in the fluid. The application of blisters appears sometimes to cause albuminous urine, probably from irritating the kidneys, and we know that hæmaturia also is at times thus produced.—*Lancet*, Dec. 2d, 1848.

MATERIA MEDICA AND PHARMACY.

9. *Action of Calomel on the Liver.* By M. Michea.—When calomel is administered in purgative doses, the stools become more liquid, and at the same time acquire a characteristic green colour. This green colour is usually, at least by English practitioners, held to indicate the presence of bile, and the experiments of our author tend to show that the opinion is well founded. Calomel stools have been analysed by Golding Bird (*Med. Gaz.*, Sept. 1845), who found only slight traces of bile; and by Siebert of Erlangen, who failed to obtain any indication of that secretion. Dr. Bird concluded from his experiments, that the green colour is due to an altered condition of the colouring matter of the blood.

M. Michéa has examined the feces under four different conditions:—

1. Feces passed by a healthy individual, no drug having been administered.—In six specimens no bile was found.

2. Green stools rendered by individuals suffering from gastro-intestinal irritation, no drug having been administered.—The presence of bile was indicated in one only of three cases examined.

3. Calomel stools. This drug was exhibited to eight individuals, and the alvine dejections presented a green colour in four. In these the presence of bile was readily demonstrated. These stools showed also the presence of a large quantity of albumen, which the author supposes to be derived from the bile.

4. Stools obtained by the exhibition of saline and other non-mercurial purgatives. —These never or very rarely present the green colour or the viscosity peculiar to calomel stools. Five specimens were examined; neither biliverdin nor albumen was found.

The author prefers the nitric acid as a test for bile. Added to an animal liquid containing this secretion, a characteristic reaction ensues; the fluid becomes first green, then bluish-violet, and finally assumes a red colour. These changes occur within the space of a few seconds.

From these experiments it may be concluded that calomel stools contain an excess of bile, as nitric acid reveals in them the existence of two principles of that secretion, biliverdin and albumen.—*Monthly Retrospect*, Dec. 1848, from *L'Union Médicale*, Oct. 21 and 23, 1848.

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10. *An Effect of Opium, upon which sufficient stress has not hitherto been laid.*—Opium increases the circulation of the skin, and diminishes that of the mucous membranes. A person who has taken a full dose of opium at night, will, amongst its other effects, feel himself the warmer for at least twenty-four hours afterwards. I am acquainted with a gentleman who has met with considerable success in his practice on indolent old ulcers, and one part of his treatment consists in his giving his patient a grain of opium thrice daily; this is done upon the principle of stimulating the capillary circulation of the part. In that form of deafness which is attended with tinnitus, and appears to consist in a congested state of the mucous membrane of the Eustachian tube and tympanum, I have often successfully prescribed opium with a view of increasing the cutaneous circulation, and diminishing that of the mucous membranes.

An old lady suffered from a severe attack of influenza, the poison of which seemed principally to operate upon the Schneiderian and bronchial mucous membranes. For four years afterwards she constantly suffered from an obstruction in both nostrils, attended with so profuse a secretion of thin mucous fluid, as to oblige her to use four or five handkerchiefs in the course of a day, and the least exposure of the lungs or surface to a cold atmosphere, brought on an asthmatic attack, which was accompanied with a copious frothy expectoration. Though she could smell